

IN THE CLAIMS

Claim 1 has been amended. Claim 5 has been canceled. The following listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A gas generation system, comprising:

 a reformer for producing a hydrogen-containing reformatate gas using raw materials, at least a first of the raw materials containing carbon and hydrogen;
 a separator device configured to selectively separate the hydrogen-containing reformatate gas into hydrogen and a residual gas, the separator device including at least one diaphragm selectively permeable for hydrogen;

 a recirculation system for recirculating an amount of the residual gas from a first location downstream of the separator device to a second location upstream from the separator device.

Claim 2 (original): The gas generation system as recited in claim 1, wherein the second location is directly in front of the separator device.

Claim 3 (original): The gas generation system as recited in claim 1, wherein the second location is in an entry area where the raw materials enter the reformer.

Claim 4 (original): The gas generation system as recited in claim 1, further comprising an enrichment device configured to enrich the hydrogen-containing reformatate gas with hydrogen and disposed between the reformer and the separator device, wherein the second location is between the reformer and the enrichment device.

Claim 5 (canceled).

Claim 6 (original): The gas generation system as recited in claim 1, wherein the recirculation system includes a transport device for the recirculated residual gas.

Claim 7 (original): The gas generation system as recited in claim 6, wherein the transport device includes a gas jet pump driven by a volume flow of at least one of the raw materials or the hydrogen-containing reformate gas stream.

Claim 8 (original): The gas generation system as recited in claim 1, wherein the reformer includes a steam reformer.

Claim 9 (original): The gas generation system as recited in claim 1, wherein the reformer includes an autothermal reformer.

Claim 10 (original): The gas generation system as recited in claim 1, wherein the gas generation system is configured to generate a hydrogen-containing gas from one of a liquid hydrocarbons and hydrocarbon derivatives for operating a fuel cell.

Claim 11 (original): The gas generation system as recited in claim 10, wherein the gas generation system is configured to generate a hydrogen-containing gas from one of a gasoline and a diesel oil.

Claim 12 (original): The gas generation system as recited in claim 10, wherein the fuel cell is part of a drive system for one of a water transportation device, a land transportation device, and an air transportation device.

Claim 13 (original): The gas generation system as recited in claim 10, wherein the fuel cell is part of an auxiliary power unit.

Claim 14 (original): The gas generation system as recited in claim 13, wherein, the auxiliary power unit is utilized in a transportation device, the transportation device including at least one of a water transportation device, a land transportation device, and an air transportation device.

Claim 15 (original): The gas generation system as recited in claim 14, wherein the transportation device is driven by an internal combustion engine.

Claim 16 (original): The gas generation system as recited in claim 1, wherein the residual gas includes hydrogen.

Claim 17 (previously presented): The gas generation system as recited in claim 1, wherein the residual gas includes carbon monoxide.

Claim 18 (previously presented): The gas generation system as recited in claim 17, wherein the residual gas further includes water vapor.

Claim 19 (previously presented): The gas generation system as recited in claim 18, wherein the residual gas further includes raw material remnants.

Claim 20 (previously presented): The gas generation system as recited in claim 18, wherein the residual gas further includes a proportion of residual hydrogen.